

**What is claimed is:**

1. A biodegradable common bile duct stent, wherein the said stent is made of biodegradable polymeric material with incorporation of X-ray opaque components;  
5 the wall of the stent is thin and the outer diameters of various parts of the stent are 1-3 times of the inner diameters of the corresponding parts of the common bile duct of a healthy person; and the said stent is fabricated according to the anatomic shape of common bile duct, and thus is suitable for longitudinal or transverse incisions at various parts of common bile duct and common hepatic duct.
- 10 2. The stent according to Claim 1, wherein the stent has a shape selected from the group consisting of straight tube, Y-shape tube, fork-shape tube, vest-shape tube, and short tube.
3. The stent according to Claim 1, wherein the stent has a length in the range of 10-80 mm and thickness of the wall in the range of 0.2-2 mm.
- 15 4. The stent according to Claim 1, wherein the said biodegradable polymers are selected from the group consisting of poly(lactic acid), poly(glycollic acid), poly( $\epsilon$ -caprolactone) and random or block copolymer of lactic acid, glycollic acid and  $\epsilon$ -caprolactone.
5. The stent according to Claim 1, wherein the said X-ray opaque components  
20 comprise barium sulfate and inorganic salts or oxides of bismuth, tantalum or tungsten, and the amount of the X-ray opaque components is between 5 and 50 % by weight based on the weight of the stent.
6. The stent according to Claim 5, wherein the amount of X-ray opaque components is between 20 and 25% by weight based on the weight of the stent.
- 25 7. The stent according to Claim 1, wherein the said wall has an outer surface comprising multiple protruding rims separated by a distance of between 5 and 10 mm, the cross section of ring is in a form of square with round angles, and the width and height of the ring are 1-2 mm respectively.
8. The stent according to Claim 1, wherein the wall structure of the stent is  
30 fabricated into the shape similar to that of larynx duct, the length of larynx segmentum is 5-20 mm, the variation range of outer diameter is 2-10 mm, and the width ratio of the concave part and the convex part is 1-10.
9. The stent according to Claim 1, wherein the length of larynx segmentum is 8-10 mm, the outer diameter is in a range of 4-6 mm, the width ratio of the concave  
35 part and the convex part is 3-5.
10. The stent according to Claim 1, wherein the outer wall of left and right arm or of the upper entrance have ring-shaped protruding rims and the long arm is fabricated into larynx structure.
11. A method for the preparation of biodegradable common bile duct stent  
40 according to any one of preceding claims, comprising
  - (1) mixing and pelletizing of biodegradable polymer, X-ray opaque components and processing additives;
  - (2) injection molding or extrusion-blowing followed by polishing of the exterior surface.